EPIDEMIC TRICHONOCARDIASIS

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INTRODUCTORY

The literature connected with Trichonocardiasis being new and of small extent, it may be of interest to record an epidemic which recently took place in the Welsh Regiment in Khartoum.

Before commencing the account of the epidemic we may mention that we have heard of a case of Trichonocardiasis rubra in a European while in Aden, but whether it originated there or was merely imported we are not in a position to state.

It would, however, appear that the Trichonocardiases are widely distributed throughout the tropics and, further, that they may occur in epidemics.

Full accounts of the history, aetiology, etc., having been already given during this year by Castellani, O'Farrell and one of us, we restrict our remarks entirely to the present epidemic, its probable origin and its suppression.

THE EPIDEMIC

About the middle of September, 1913, a Private in the Welsh Regiment, which had been stationed in Khartoum for some months, applied for medical treatment on account of irritation of the skin in both axillae. On investigation it was found that the hairs of these regions were heavily infected with Trichonocardiasis rubra. Figure I is a photograph of one of his axillae and shows the remarkably heavy infection of the

hairs which were matted together. The skin surrounding this mass of hairs was red, congested, and very irritable. The individual hairs, separated out and photographed, are depicted, natural size, in Figure II, which is improved if examined by a lens. As, however, this affection of the hair has been recently described by Castellani and by one of us in conjunction with Captain O'Farrell, R.A.M.C., no further remarks will be made as to the clinical appearances or the microscopical findings, except to state that they entirely agree with those already reported.

FIG. I.—Photograph of an axilla, showing infection with Trichonocardiasis rubra. Note the thickenings and the matting of the hairs.

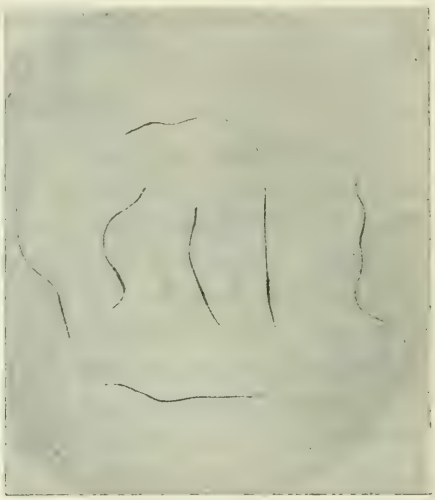

FIG. II.—Photograph of hairs from the axilla depicted in Fig. I, natural size. This figure is improved if examined by means of a lens.

The occurrence of this case led to a systematic investigation of the regiment, when no less than 42 cases, in all, were discovered. Some of the men complained of slight irritation in the axillae, and these men invariably had an area of erythema surrounding the hairs of the axilla, but the majority of men had felt no symptoms and did not appear to have noticed the altered colour of the hair. None of the cases showed any affection of the hairs on the pubis or any other part of the body.

The most common variety was Trichonocardiasis flava, while a

number of cases showed Trichonocardiasis rubra, but no Trichonocardiasis nigra could be found.

The erythema noted was only seen in men suffering from Trichonocardiasis rubra.

A thorough investigation was made as to the possible source of infection, and very early suspicion was aroused that the washermen might possibly be the spreaders.

There were, in all, five washermen and four washerwomen for the cleansing of the regimental clothing. All these, save one, worked in the central washhouse and these were found to be free from Trichonocardiasis. The remaining washerman, who was occasionally assisted by one of the other washermen, went from bungalow to bungalow in the barracks for the purpose of doing extra washing for the men, as the regulation washing was insufficient to keep the clothing clean in a hot dusty country like the Anglo-Egyptian Sudan. This man washed, in particular, the shirts and the khaki trousers for the men. He was found to be infected with Trichonocardiasis flava and rubra, and he was strongly suspected to be the spreader of the infection, as it was not confined to the men of any one company but scattered through all the companies of the regiment.

This washerman and the infected men were duly treated, with the result that during the last inspection, made a few days ago, no new cases were found.

TREATMENT

As so many men were affected it afforded ample opportunity for observing the results of various forms of anti-parasitic treatment.

Most of the cases were treated by means of a lotion of formalin 40 per cent., one drachm to six ounces of rectified spirit. This lotion was carefully applied to the hair twice daily. It was advisable to restrict this application entirely to the hairs as it was often found to irritate the skin if it was carelessly rubbed into the axilla.

At night a 2 per cent. sulphur ointment was applied, thus completing the routine recommended by Castellani. The result was excellent, but it required time, and, on an average, a cure was not effected under three to four weeks.

If the cases did not improve under this treatment, application of tincture of iodine effected a cure in three to four days.

Tincture of iodine alone was also applied, but with doubtful advantage.

Perchloride of mercury was also tried, but it required three to four weeks to bring about a cure.

The best remedy in our hands appeared to be a combination of the formalin-sulphur method for about two days, followed by tincture of iodine, when a cure was effected in several cases in less than a week.

With regard to the erythematous areas mentioned above, these were readily healed by the application of Calamine lotion, associated with the anti-parasitic treatment to the hairs, as already described.

In addition, all the underclothing was dusted regularly with a boric acid powder of the strength of one drachm to the ounce of starch powder. This is not the best powder for the purpose, but it is the cheapest and is readily available. The use of dermatol, europhen or of xeroform with Venetian talc would be better, but the boric acid served its purpose quite well.

KHARTOUM,
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REFERENCES

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